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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Zilles, et al.  
SERIAL NO.: 10/055,565 GROUP NO.: 2773  
FILING DATE: October 26, 2001 EXAMINER: Not Yet Assigned  
TITLE: Method and Apparatus for Determining Forces to be Applied to a User  
Through a Haptic Interface

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Technology Center 2100

Box Non-Fee Amendment  
Assistant Commissioner for Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Please enter the following two new claims, 82 and 83, and consider the Remarks that follow. The appropriate fee for two additional independent claims is being submitted herewith. Applicants believe that no additional fees are due, but if additional fees are due, the Director of the United States Patent and Trademark office is hereby authorized to charge such additional fees to Deposit Account No. 20-0531.

New Claims:

82. (New) A method for determining forces to be applied to a user through a haptic interface, said method comprising the steps of:

(a) generating a representation of an object in graphic space by defining said object as a mesh of planar surfaces, each of said planar surfaces comprising nodes;

(b) sensing a position of a user in real space;

(c) determining a haptic interface location in graphic space in response to said position of said user in real space;

(d) determining a fiducial object location in graphic space;

(e) calculating a stiffness force to be applied to said user in real space in response to said haptic interface location and said fiducial object location in graphic space; and

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02 FC:103

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